

JOURNAL OF PLASMA AND FUSION RESEARCH

The Journal of the Japan Society of Plasma Science and Nuclear Fusion Research

Vol. 94, No.2, February 2018

Commentary

Physical Processes of Sunspot Formation and Flare Eruption Originated from Dynamo Action NISHIZUKA Naoto, HOTTA Hideyuki and TORIUMI Shin	51
--	----

Special Topic Article

Current Status and Prospects of Electric Rocket Propulsion Technology	
1. Introduction TAHARA Hirokazu	58
2. Current and Future Missions Using Electric Rocket Propulsion NISHIYAMA Kazutaka and KINEFUCHI Kiyoshi	60
3. Current Status and Issues of Electric Rocket Propulsion for Future Missions	
3.1 Electrothermal Thrusters TAHARA Hirokazu	66
3.2 Electrostatic Thrusters YAMAMOTO Naoji and WATANABE Hiroki	71
3.3 Electromagnetic Thrusters ANDO Akira and TAKAHASHI Kazunori	76
4. Applications of Electric Rocket Propulsion Technology to Other Fields MOMOZAWA Ai	81

Lecture Note

You're One of Pythonistas from Today	
1. Preface YOSHINUMA Mikirou	86
2. Python Start-Up Guide FUJII Keisuke	90

Information	102
-------------------	-----

Plasma & Fusion Calendar	112
--------------------------------	-----

Announcement	114
--------------------	-----

Cover

(a) Helium plasma irradiation was conducted in divertor simulator NAGDIS-II as pulsating the incident ion energy from 7 - 8 eV to higher than 50 eV. (b) Although in general the growth of the fuzzy tungsten nanostructures requires the incident ion energy of 20 - 30 eV, the helium plasma with the incident ion energy of 7 - 8 eV under the pulsation enhanced the growth of the fuzzy nanostructures. (c) On the other hand, no nanostructure growth occurred at 1300 K, probably because of annealing effect. (Shin KAJITA *et al.*, Plasma and Fusion Research, Vol.13, 1205001 (2018) <http://www.jspf.or.jp/>)